

REMARKS

In view of the above amendments and following remarks, reconsideration and further examination are requested.

The specification and abstract have been reviewed and revised to make editorial changes thereto and generally improve the form thereof, and a substitute specification and abstract are provided. No new matter has been added by the substitute specification and abstract. Also, enclosed is a "marked-up" copy of the original specification and abstract to show changes that have been incorporated into the substitute specification and abstract. The attached pages are captioned "Version With Markings To Show Changes Made."

Proposed drawing amendments in red, along with formal drawings incorporating these amendments, are provided for Figures 35, 36 and 37.

Initially, it is unclear as to what is intended in section 1 on page 2 of the Office Action, since claim 21 recites an article claim and not a method claim. Regardless, because the Examiner has examined all of the claims 1-21, and because new claims 22-43 correspond to former claims 1-21, it is respectfully submitted that it would be inappropriate for the Examiner to issue a restriction requirement between any of the claims based on original presentation since there would be no undue burden on the Examiner to continue examining the claims which have already been initially examined.

In sections 4-7 on pages 2-3 of the Office Action, the Examiner has rejected claims 14 and 16 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Presumably, the Examiner intended to also reject claim 13 since this claim includes the same language of claim 14 found to be objectionable, along with claim 17 since this claim includes the language objected to by the Examiner as expressed in section 6 of the Office Action.

In any event, by the current Amendment, claims 1-21 have been replaced by claims 22-43. New claims 22-43 have been drafted taking into account the 35 U.S.C. 112, second paragraph, issues raised by the Examiner, and are believed to be in compliance with 35 U.S.C. 112, second paragraph.

However, with regard to the Examiner's objection to the language "made from a material that is easily vaporizable and foamable", it respectfully submitted that one having ordinary skill in the art would fully appreciate materials that are easily vaporizable and foamable. Thus, the claims continue to recite that the substrate sheet comprises an "easily vaporizable and foamable material".

Also, with regard to the Examiner's objection to the language that the carrier sheet exhibits a dimensional change rate "within 0.6%", please note that the "dimensional change rate" is obtained by performing a tensile test until a test specimen is broken. For example, with regard to former claims 13 and 14, a dimensional change rate of a carrier sheet within 0.6% under an ambient temperature 90°C is obtained by measuring a distance between chucks of a tensile tester at breakage of a test specimen of the carrier sheet held by the chucks, subtracting from this distance the distance between the chucks prior to performing the tensile test, multiplying this difference by 100, and then dividing this product by the distance between the chucks before the tensile test. Stated otherwise, the dimensional change rate is defined by the following equation

$$\frac{\{(\text{distance between the chucks at breakage}) - (\text{distance between the chucks before the tensile test})\} \times 100}{(\text{distance between the chucks before the tensile test})}.$$

Accordingly, it is respectfully submitted that one having ordinary skill in the art would fully understand and appreciate what is recited in former claims 13 and 14, and thus the claims continue to recite a "dimensional change rate within 0.6%".

The instant invention pertains to a decorating sheet for use in the production of an article, a method of producing the decorating sheet, and a molded article including the decorating sheet. The article is produced by positioning the decorating sheet in an injection mold, closing the injection mold, injecting molten resin into the injection mold, and cooling and solidifying the molten resin into a solid body such that all or part of the decorating sheet is integrally bonded to the solid body. The decorating sheet includes a substrate sheet and a backing sheet, exhibits a colored condition, and has the following characteristics

(i) when a 10 mm wide test specimen of the decorating sheet is fixed between a pair of chucks at a chuck-to-chuck distance of 5 mm and then a load is applied at a constant rate of 500 mm/min to the test specimen at one end thereof under a temperature of from 62°C to 94°C, the test specimen exhibits a tensile strength at breakage thereof of at least 23 gf, and

(ii) properties of the decorating sheet change in response to being subjected to a temperature from 40°C to 200°C, and when a 10 mm wide test specimen of the decorating sheet is fixed between a pair of chucks at a chuck-to-chuck distance of 5 mm and then a load of 20 gf is applied at a constant rate of 500 mm/min to the test specimen at one end thereof under a temperature from a first temperature within the range from 40°C to 200°C to a second temperature at which the decorating sheet decomposes, the test specimen exhibits a tensile elongation at breakage of at least 130%.

The significance of a decorating sheet having these characteristics is that the decorating sheet will not break during the above-described injection molding operation.

Claims 22, 39, 41 and 43 are believed to be representative of the invention.

The Examiner has rejected claims 1-21 under 35 U.S.C. 103(a) as being unpatentable over JP '397 in view of Aleckner, Jr. et al. and JP '085. This rejection is respectfully traversed and these references are not applicable with regard to the newly added claims for the following reasons.

The Examiner acknowledges that none of JP '397, Aleckner, Jr. et al. and JP '085 disclose the two characteristics of the decorating sheet as recited in former claim 1 (now recited in each of claims 22, 39, 41 and 43), or the additional characteristic of the decorating sheet as recited in former claim 2 (now recited in claim 23). Accordingly, in order to reject claims 1 and 2, the Examiner has taken the position that because all of the physical and material requirements of claims 4-21 are met by a combination of JP '397, Aleckner, Jr. et al., and JP '085, it necessarily follows that the characteristics of the decorating sheet as recited in claims 1 and 2, now recited in claims 22 and 23, are met. Stated otherwise, the Examiner has taken the position that the characteristics of the decorating sheet as recited in claims 1 and 2 would be inherent when the teachings of JP '397, Aleckner, Jr. et al. and JP '085 are combined. This position taken by the Examiner is respectfully traversed for the following reasons.

Not only is it respectfully submitted that the combination of references would not result in the physical and material requirements of the dependent claims, but as expressed in MPEP Section §2112, to establish inherency the Examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristics necessarily flow from the teachings of the applied prior art. It is respectfully submitted that the Examiner has failed to provide such a basis. In this regard, that a combination of the references would result in all of the physical and material requirements of the dependent claims, as asserted by the Examiner, it is not by itself sufficient as a matter of fact or technical reasoning to support the inherency position taken by the Examiner.

Accordingly, even if the combination of the references relied upon by the Examiner would have resulted in a decorating sheet having features as recited in the dependent claims, claims 22, 23, 39, 41 and 43 would remain patentable because the Examiner has failed to meet his burden of providing a basis in fact and/or technical reasoning that the characteristics of the decorating sheet as recited in the independent claims necessarily flow from the teachings of the prior art references relied upon by the Examiner. Thus, for this reason alone, claims 22-43 are allowable over a combination of the references relied upon by the Examiner.

Furthermore, irrespective of the above, claims 22-43 are allowable over the combination of references relied upon by the Examiner, because there would have been no motivation to combine these references so as to result in a decorating sheet having the characteristics as recited in any of claims 22-43.

In this regard, the Examiner has taken the position that in view of Aleckner, Jr. et al, one having ordinary skill in the art would have found it obvious to have the sheet 5 of JP '397 be made from the thermal plastic polymer blend taught by Aleckner, Jr. et al. This position taken by the Examiner is respectfully traversed.

Specifically, Aleckner, Jr., et al. relates to selection, blend, or reformation of an olefin-based injection-molding resin and discloses that when a painting operation is performed on a molded body made from an olefin-based thermoplastic resin such as polyethylene, polypropylene, etc., there are some problems with regard to the adhesion of the paint to the molded body. In order to address these

problems, Aleckner, Jr. et al. teaches that unsaturated carboxylic acid or inorganic fillers (talc etc.) is added to the resin, or alternatively, that the resin is polymerized into a copolymer or is blended. Therefore, the inventive aspect of Aleckner, Jr. et al. resides in the composition of resin to be solidified into a solid body, and **not** the composition of a sheet that is to be bonded to the solidified resin body. Aleckner, Jr. et al. teaches nothing with regard to how a sheet can be prevented from breaking during an injection molding operation.

Accordingly, the most that one would have gleaned from Aleckner, Jr et al. with regard to modification of JP '397 is that the polymer blends of Aleckner, Jr et al. could possibly be used for the molded body of JP '397, to which molded body an acrylic insert film 1 is bonded during an injection molding operation, which film 1 includes the sheet 5. However, contrary to the position taken by the Examiner, Aleckner, Jr et al. provides no teaching or motivation for modifying the sheet 5 of JP '397.

Thus, one having ordinary skill in the art would not have been motivated to combine the teachings of JP '397 and Aleckner, Jr., et al. for the reasons as set forth by the Examiner. Accordingly, for this reason alone claims 22-43 are allowable over any combination of JP '397 and Aleckner, Jr., et al.

JP '085 does not resolve any of the above deficiencies of JP '397 and Aleckner, Jr. et al., and accordingly, claims 22-43 are also allowable over any possible combination of JP '397, Aleckner, Jr. et al. and JP '085.

In view of the above amendments and remarks, it is respectfully submitted that the present application is in condition for allowance and an early Notice of Allowance is earnestly solicited.

If after reviewing this Amendment, the Examiner believes that any issues remain which must be resolved before the application can be passed to issue, the Examiner is invited to contact the Applicant's undersigned representative by telephone to resolve such issues.

Respectfully submitted,

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